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| 10/676,541           | 10/01/2003  | Mark L. Wilkinson    | 1073.P004 US        | 7659             |
| 32794                | 7590        | 07/29/2008           |                     |                  |
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| Irvine, CA 92612     |             |                      | ART UNIT            | PAPER NUMBER     |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/676,541

**Applicant(s)**

WILKINSON ET AL.

**Examiner**

Thanhnga B. Truong

**Art Unit**

2135

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 May 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-66 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-12 and 14-66 is/are rejected.  
7) ☒ Claim(s) 13, 33, 45 and 57 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. In view of the Appeal Brief filed on February 5, 2008, PROSECUTION IS HEREBY REOPENED. A new ground(s) of rejection is set forth below. Claims 1-66 are pending. At this time, claims 1-12, 14-66 are still rejected.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

Signature:/Nasser G Moazzami/

Supervisory Patent Examiner, Art Unit 2136

### ***Response to Argument***

2. The Appeal Brief filed May 21, 2008 has been carefully considered by an Appeal Conference. The conferees agreed that Carter fails to teach the claimed inferring a respective state of at least one device of the plurality of devices base upon the observing the communication. Thus the finality of the office action mailed August 8, 2007 is now withdrawn. The office regrets any inconvenience due to the applicant. However, upon further consideration, a new ground(s) of rejection is made in view of Jancke et al (US 5,764,913) and Gleichauf et al (6,324,656 B1).

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 31-43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

These claims recites the language "tangible computer-readable medium", wherein the term "tangible" does not disclose and/or describe any where in the disclosure. Therefore, claims 31-43 contains new matter. Appropriate correction is required.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 44-54 and 56-66 recites the limitation "computer-readable medium" in the pre-amble of the claims. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 101***

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1-66 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 recites "a method comprising: observing communication between a plurality of devices; and inferring a respective state of at least one device of the plurality of devices based upon the observing the communication." The process of claim does not consist of data structures which impart functionality when employed as a

computer component. Thus, claim 1 is found to be nonfunctional descriptive material. Therefore, claim 1 recites a non-statutory subject matter.

Claims 2-42 are dependent of claim 1, thus they are rejected with the same rationale applied against claim 1 above.

Claim 43 has limitation that is similar to those of claim 1, thus they are rejected with the same rationale applied against claim 1 above.

Claims 44-54 are dependent of claim 43, thus they are rejected with the same rationale applied against claim 43 above.

Claim 55 has limitation that is similar to those of claim 1, thus they are rejected with the same rationale applied against claim 1 above.

Claims 56-66 are dependent of claim 55, thus they are rejected with the same rationale applied against claim 55 above.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 31, 43, and 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Gleichauf et al (US 6, 324, 656 B1).

a. *Referring to claim 1:*

i. Gleichauf teaches a computer-implemented method comprising:

(1) observing (e.g. monitoring/pinging) communication between a plurality of devices (**see abstract and column 2, lines 6-9 and lines 30-32; column 4, lines 15-19 of Gleichauf**); and

(2) inferring a respective state of at least one device of the plurality of devices based upon the observing the communication (**column 2, lines 6-11, lines 30-34, and lines 43-56; column 4, lines 20-26, and 43-55 of Gleichauf**).

b. Referring to claim 31:

i. This claim consists a system to implement claim 1, thus it is rejected with the same rationale applied against claim 1 above.

c. Referring to claim 43:

i. This claim consists a system to implement claim 1, thus it is rejected with the same rationale applied against claim 1 above.

d. Referring to claim 55:

i. This claim consists a computer-readable medium to implement claim 1, thus it is rejected with the same rationale applied against claim 1 above.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1, 31, 43, and 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Jancke et al (US 5,764,913).

a. Referring to claim 1:

i. Jancke teaches a computer-implemented method comprising:

(1) observing communication between a plurality of devices (**see abstract and column 1, lines 51-59 of Jancke**); and

(2) inferring a respective state of at least one device of the plurality of devices based upon the observing the communication (**column 1, lines 51-67 and column 2, lines 1-4 of Jancke**).

b. Referring to claim 31:

i. This claim consists a system to implement claim 1, thus it is rejected with the same rationale applied against claim 1 above.

c. Referring to claim 43:

i. This claim consists a system to implement claim 1, thus it is rejected with the same rationale applied against claim 1 above.

d. Referring to claim 55:

i. This claim consists a computer-readable medium to implement claim 1, thus it is rejected with the same rationale applied against claim 1 above.

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 2-12, 14-30, 32, 34-42, 44, 46-54, 56, and 58-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter et al (US 2003/0051026), and further in view of Beach (US 6,067,297).

b. Referring to claims 2-3:

i. Jancke teaches the claimed subject matter, however Jancke is silent on the capability of wherein the inferring is performed without sending a packet to the at least one device (**paragraphs 0057, 0559-0560 of Carter**); or without

participating in the communication with the at least one device. On the other hand, Carter teaches this limitation in **(paragraph 0560 of Carter)**.

iii. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

(1) have modified the invention of Jancke with the teaching of Carter for monitoring, and in particular to a system for obtaining, concurrently displaying, and dynamically updating, an operational state indicator for a plurality of nodes in a computer network **(column 1, lines 6-9 of Jancke)**.

iv. The ordinary skilled person would have been motivated to:

(1) have modified the invention of Jancke with the teaching of Carter to monitoring and protecting networks of computers **(paragraph 0003 of Carter)**.

c. Referring to claim 4:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) wherein the inferring is performed only by listening (e.g., eavesdropping) to the communication with the at least one device **(paragraphs 0122, 0560 and 1066 of Carter)**.

d. Referring to claim 5:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) setting a designation for a first device of the plurality of devices to a threat when the first device receives a packet and the respective state of the first device is unfulfilled **(paragraphs 0006 and 0260-0261 of Carter)**.

e. Referring to claim 6:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:



(1) changing the designation for the first device to a non-threat when subsequent communication initiated by the first device does not violate a rule for the communication (**paragraphs 0479 and 0785-0787 of Carter**).

f. Referring to claim 7:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) setting a designation for a first device of the plurality of devices to a possible threat when the communication is initiated by the first device (paragraphs 0006 and 0260-0261 of Carter), and the communication initiated by the first device violates a rule (**paragraphs 0787, 0790, 0978-0984 of Carter**).

g. Referring to claim 8:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) changing the designation for the first device to a non-threat when subsequent communication initiated by the first device does not violate a second rule for the communication (**paragraphs 0479 and 0785-0787 of Carter**).

h. Referring to claim 9:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) setting a designation for a first device of the at least one device to a possible threat based upon a packet configuration for a packet sent by the first device as part of the communication (**paragraphs 0006 and 0260-0261 of Carter**).

i. Referring to claim 10:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) the respective state of a first device of the at least one device is determined to be unknown (**paragraphs 0260-0261 and 0652 of Carter**).

j. Referring to claim 11:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) the respective state of the first device is determined to be unknown (**paragraphs 0260-0261 and 0652 of Carter**) when the observing the communication comprises observing that the first device fails to respond to the communication sent to the first device (**paragraphs 0289, 0787, and 0985 of Carter**).

k. Referring to claim 12:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) the respective state of a first device of the at least one device is determined to be unfulfilled (**paragraphs 0006 and 0260-0261 of Carter**).

l. Referring to claim 14:

i. This claim has limitations that is similar to those of claim 11, thus it is rejected with the same rationale applied against claim 11 above.

m. Referring to claim 15:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) the respective state of a first device of the plurality of devices is determined to be used (**paragraphs 0260-0261 and 0652 of Carter**).

n. Referring to claim 16:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) the respective state of the first device is determined to be used when the observing the communication comprises observing that the first device performs one of sending and receiving a packet (**paragraphs 0019, 0023-0024, and 0028 of Carter**).

o. Referring to claim 17:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) the respective state of the first device is determined to be used when the observing the communication comprises:

(2) observing that the first device received a packet when the respective state for the first device was unfulfilled (**paragraphs 0006 and 0260-0261 of Carter**), and

(3) observing that the first device sent a reply to the packet within a time limit (**paragraphs 0028, 0084, and 0152 of Carter**).

p. Referring to claim 18:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) wherein the respective state of a first device of the plurality of devices is determined to be virtual (**paragraphs 0011 and 0166 of Carter**).

q. Referring to claim 19:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) wherein the respective state of the first device is determined to be virtual when the observing the communication comprises:

(2) observing that the first device received a packet when the respective state for the first device was unfulfilled (**paragraphs 0006 and 0260-0261 of Carter**), and

(3) observing that the first device did not send a reply to the packet within a time limit (**paragraphs 0028, 0084, 0152, and 0870 of Carter**).

r. Referring to claim 20:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) wherein the respective state of a first device of the plurality of devices is determined to be automatic (**paragraphs 0800-0801, and 0945 of Carter**).

s. Referring to claim 21:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) wherein the respective state of the first device is determined to be automatic when an automatic reply is programmed to be sent to a second address when the first device receives a packet from the second address **(paragraphs 0800-0801, and 0945 of Carter)**.

t. Referring to claim 22:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) wherein the respective state of the first device is determined to be omitted (e.g., ignored) **(paragraphs 0431, 0870, 0920, and 0966 of Carter)**.

u. Referring to claim 23:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) wherein the respective state of the first device is determined to be omitted when the observing is programmed to omit communication with the first device from the observing **(paragraphs 0431, 0870, and 0966 of Carter)**.

v. Referring to claim 24:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) initializing the respective state of at least one device of the plurality of devices to unknown prior to the observing **(paragraphs 0260-0261, 0785, and 0881 of Carter)**.

w. Referring to claim 25:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) wherein the plurality of devices communicates via a segment (e.g., portion) of a network **(paragraphs 0228, 0258, and 0652 of Carter)**.

x. Referring to claim 26:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) maintaining the respective state for one device of the at least one device in a storage area (**paragraphs 0207 and 0772 of Carter**).

y. Referring to claim 27:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) wherein storing information about at least one packet of a plurality of packets communicated between the plurality of devices (**paragraphs 0207 and 0772 of Carter**).

z. Referring to claims 28-30:

i. The combination of teaching between Jancke and Carter teaches the claimed subject matter. Carter further teaches:

(1) wherein the information comprises a respective source address and a respective destination address and a protocol for each packet of the plurality of packets; and a time that each packet of the plurality of packets was sent (**paragraphs 0208-0216 of Carter**).

aa. Referring to claims 31-32, 34-42:

i. These claims consist a system to implement claim 1, thus they are rejected with the same rationale applied against claims 1, 10-11,13-14,16-17,19,21,23,26-27 above.

ab. Referring to claims 43-44, 46-54:

i. These claims consist a system to implement claim 1, thus they are rejected with the same rationale applied against claims 1, 10-11,13-14,16-17,19,21,23,26-27 above.

ac. Referring to claims 55-56, 58-66:

i. These claims consist a computer-readable medium to implement claim 1, thus they are rejected with the same rationale applied against claims 1, 10-11,13-14,16-17,19,21,23,26-27 above.

***Allowable Subject Matter***

15. Claims 13, 33, 45, and 57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanhnga (Tanya) Truong whose telephone number is 571-272-3858.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached at 571-272-3859. The fax and phone numbers for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

/Thanhnga B. Truong/  
Primary Examiner, Art Unit 2135

TBT  
July 21, 2007

